a (NHCO) retro inverso bond, a (CH_2-O) methylene-oxy bond, a (CH_2-S) thiomethylene bond, a (CH_2CH_2) carba bond, a (CO-CH_2) cetomethylene bond, a (CHOH-CH_2) hydroxyethylene bond, a (N-N) bond, a E-alcene bond or also a -CH=CH- bond.

6. (Amended) The inhibitor molecule according to anyone of claims 1 to 5, which is derived from the P95/nucleolin amino acid sequence and chosen among the following sequences:

- the sequence beginning at the amino acid in position 22 and ending at the amino acid in position 44;

- the sequence beginning at the amino acid in position 143 and ending at the amino acid in position 171;

- the sequence beginning at the amino acid in position 185 and ending at the amino acid in position 209;

- the sequence beginning at the amino acid in position 234 and ending at ~~the amino acid in position 271;~~

7. (Amended) The inhibitor molecule according to anyone of claims 1 to 5, which is derived from the P30/PHAPI amino acid sequence and chosen among the following sequences:

- the sequence beginning at the amino acid in position 168 and ending at the amino acid in position 182;

- the sequence beginning at the amino acid in position 187 and ending at the amino acid in position 222;

LAW OFFICES
FINNEGAN, HENDERSON,
FARABOW, GARRETT,
& DUNNER, L.L.P.
1300 I STREET, N. W.
WASHINGTON, DC 20005
202-408-4000

- the sequence beginning at the amino acid in position 240 and ending at the amino acid in position 249; it being understood that the proximity of the two first sequences and the two last sequences allow one of ordinary skill in the art to gather the sequences contained in two sets of sequences as follows :

- the sequence beginning at the amino acid in position 168 and ending at the amino acid in position 222;

- the sequence beginning at the amino acid in position 187 and ending at the amino acid in position 249.

D1 cont

8. (Amended) The inhibitor molecule according to anyone of claims 1 to 5, which is the following sequence derived from the P40/PHAPII amino acid sequence:

- the sequence beginning at the amino acid in position 223 and ending at the amino acid in position 277.

9. (Amended) The inhibitor molecule according to claim 2 which comprises a polymer of an inhibitor molecule according to anyone of claims 3 to 8, that contains 2 to 20 monomer units of the amino acid sequence of interest derived from the amino acid sequence of either P95/nucleolin, P40/PHAPIII and P30/PHAPI, preferably 4 to 15 monomer units and more preferably 5 to 10 monomer units.

D2

14. (Amended) A therapeutic composition comprising a pharmaceutically effective amount of a polynucleotide coding for the P95/nucleolin, P40/PHAPIII and P30/PHAPI or one of the monomeric or oligomeric peptide inhibitor molecules according to anyone of claims 2 to 9.

LAW OFFICES
FINNEGAN, HENDERSON,
FARABOW, GARRETT,
& DUNNER, L.L.P.
1300 I STREET, N. W.
WASHINGTON, DC 20005

16. (Amended) A method for specific replacement, in particular by targeting the P95/nucleolin, P40/PHAPIII and P30/PHAPI protein encoding DNA, called insertion DNA, comprising all or part of the DNA structurally encoding for the P95/nucleolin, P40/PHAPIII and P30/PHAPI protein or one of its biologically active derivatives, when it is recombined with a complementing DNA in order to supply a complete recombinant gene in the genome of the host cell of the patient, characterized in that:

a) the site of insertion is located in a selected gene, called the recipient gene, containing the complementing DNA encoding the P95/nucleolin, P40/PHAPIII and P30/PHAPI protein or one of its biologically active derivatives and;

b) the polynucleotide coding for the P95/nucleolin, P40/PHAPIII and P30/PHAPI protein or one of its biologically active derivatives may comprise:

- flanking sequences on either side of the DNA to be inserted, respectively homologous to two genomic sequences which are adjacent to the desired insertion site in the recipient gene;

- the insertion DNA being heterologous with respect to the recipient gene, and;

- the flanking sequences being selected from those which constitute the above-mentioned complementing DNA and which allow, as a result of homologous recombination with corresponding sequences in the recipient gene, the reconstitution of a complete recombinant gene in the genome of the eukaryotic cell.

LAW OFFICES
FINNEGAN, HENDERSON,
FARABOW, GARRETT,
& DUNNER, L.L.P.
1300 I STREET, N. W.
WASHINGTON, DC 20005
202-408-4000

17. (Amended) A therapeutic composition comprising an antisense polynucleotide complementary to the nucleic acid sequence of P95/nucleolin, P40/PHAPIII and P30/PHAPI represented in Figure 49.

18. (Amended) A method for screening inhibitor molecules according to anyone of claims 1 to 12 comprising the steps of:

a) preparing a complex between the P95/nucleolin, P40/PHAPII and P30/PHAPI protein and a ligand that binds to the P95/nucleolin, P40/PHAPII and P30/PHAPI protein by bringing into contact the purified P95/nucleolin, P40/PHAPII and P30/PHAPI protein with a solution containing a molecule to be tested as a ligand binding to the P95/nucleolin, P40/PHAPII and P30/PHAPI protein;

b) visualizing the complex formed between the purified P95/nucleolin, P40/PHAPII and P30/PHAPI protein and the molecule to be tested.

23. (Amended) A method for screening inhibitor according to anyone of claims 2 to 12, comprising the following steps:

a) bringing into contact cells expressing the novel receptor according to the present invention at their surface with an amount of a HIV retrovirus equal to the $TCID_{50}$;

b) incubating said cells and retroviruses at 37°C during a period of time sufficient to allow the entry of the retrovirus within the cells, in the presence of a defined amount of the compound to be assayed;

LAW OFFICES
FINNEGAN, HENDERSON,
FARABOW, GARRETT,
& DUNNER, L.L.P.
1300 I STREET, N. W.
WASHINGTON, DC 20005
202-408-4000